

effects other than bleeding and thrombosis (38.5% vs. 16.7%,  $p=0.004$ ). Patients on TSOAC had a lower [better] mean QoL summary score compared to warfarin treated patients (39.2±11.3 vs. 46.8±19.8,  $p=0.01$ ). Based on the results of the unadjusted linear regression model, patients treated with TSOAC had significantly better DASS QoL summary score ( $\beta=-7.65$ , 95% CI: -13.49, -1.82,  $p<0.05$ ); however, after adjusting for differences in patient groups, the effect of TSOAC on QoL became non-significant ( $\beta=4.47$ , 95% CI: -5.06, 14.00,  $p=0.35$ ). **CONCLUSIONS:** Differences in social-demographic characteristics between patients treated with warfarin and TSOAC were observed in an inner-city population. After adjusting for patient social-demographic characteristics, TSOAC had no impact on treatment-related QoL.

#### PCV108

##### PRELIMINARY VERIFICATION OF THE DIAGNOSTIC ACCURACY OF THE SYNDROME DIFFERENTIATION QUESTIONNAIRE OF PHLEGM AND BLOOD STASIS (SDQ-PBS)

Lv MJ<sup>1</sup>, Zhang Z<sup>2</sup>, Zhang HY<sup>2</sup>, Chen ZH<sup>1</sup>, Yu CH<sup>3</sup>, Liu GY<sup>1</sup>, Chen LJ<sup>1</sup>, Meng FL<sup>1</sup>, Yang GL<sup>1</sup>

<sup>1</sup>Liaoning University of Traditional Chinese Medicine, Shenyang, China, <sup>2</sup>Affiliated Hospital of Liaoning University of Traditional Chinese Medicine, Shenyang, China, <sup>3</sup>China Academy of Chinese Medical Sciences

**OBJECTIVES:** SDQ-PBS was a validated and reliable diagnostic instrument for syndrome of PBS of angina patients. For well reception and wide application, it was important and necessary to verify the diagnostic accuracy of the syndrome dimension of the questionnaire before applications. **METHODS:** The Fisher's discriminant model was established for syndrome of PBS dimension to determine weights of items. Angina patients (40-85 years old) diagnosed by coronary angiography or coronary computed tomography were selected to complete the SDQ-PBS. Syndrome of PBS and non-PBS (any other syndromes) were diagnosed by 3 traditional Chinese medicine physicians. According to the Canadian Cardiovascular Society Classification (CCSC), subjects of PBS were divided into mild and severe degree. Final scores were calculated combining initial scores and weights of items. The diagnostic accuracy was preliminarily verified by comparison of final scores and diagnostic threshold. **RESULTS:** The Fisher's discriminant model =  $1.444 \times \text{somber complexion} + 1.083 \times \text{heavy body} + 0.913 \times \text{purple lips} + 0.845 \times \text{poor appetite} + 0.605 \times \text{glomus}$  and fullness +  $0.436 \times \text{sliminess in mouth} - 6.426$ . There were 44 subjects (age:  $69.12 \pm 9.26$ , sex: male, 36.36%) involved and 35 were diagnosed PBS, 9 non-PBS. According to CCSC, 19 were mild degree and 16 severe. Through the comparison of final scores and diagnostic threshold (8.5), 34 of 35 PBS subjects were diagnosed as syndrome of PBS, the diagnostic accuracy of the syndrome dimension was 97.143%. Of 9 non-PBS subjects, 1 was diagnosed PBS, the diagnostic accuracy was 88.889%. For subjects of mild and severe degree, 18 and 16 were diagnosed PBS respectively, the diagnostic accuracy were 94.737% and 100%. **CONCLUSIONS:** The diagnostic accuracy of the syndrome dimension of the questionnaire was high. For different degree of angina, the instrument was more suitable for severe patients. In the future, more study will be conducted to further verify the diagnostic accuracy of the questionnaire.

#### CARDIOVASCULAR DISORDERS – Health Care Use & Policy Studies

##### PCV109

##### A SYSTEMATIC REVIEW, CRITICAL APPRAISAL AND ANALYSIS OF THE QUALITY OF ECONOMIC EVALUATIONS IN STROKE IMAGING

Burton KR<sup>1</sup>, Perlis N<sup>1</sup>, Krahn M<sup>2</sup>, Kapral MK<sup>2</sup>, Moody A<sup>1</sup>, Laupacis A<sup>2</sup>

<sup>1</sup>University of Toronto, Toronto, ON, Canada, <sup>2</sup>Toronto, ON, Canada

**OBJECTIVES:** To review the quality of economic evaluations of acute stroke imaging to direct thrombolytic therapy and to identify areas for improvement in future economic evaluations. **METHODS:** We conducted searches of electronic databases including Medline, EMBASE, CINAHL, Econlit, the NHS Economic Evaluation Database and the Tufts Cost-Effectiveness Analysis (CEA) Registry from January 1950 through July 2012. Inclusion criteria were empirical studies published in any language that reported economic evaluation results of two or more imaging interventions for patients presenting with symptoms suggestive of acute stroke. Study quality was assessed by a 35-item checklist published by the British Medical Journal (BMJ). **RESULTS:** A total of 1,063 citations were identified, and 5 met the inclusion criteria. Four of 5 papers were explicit in their analysis perspectives, which included health care system payers, hospital and other stroke service providers. Two studies reported results for 5-year time horizons and 3 reported lifetime results. All reported morbidity outcomes using the modified Rankin Scale score. The median quality score using the BMJ tool was 84.4% (range = 71.9-93.5%). Three studies evaluated perfusion computed tomography (CTP) as a comparator to unenhanced CT (UCT) but due to a paucity of data, assumed that CTP outcomes were equivalent to those of patients assessed by other imaging modalities. Most studies included post-thrombolysis intracranial hemorrhage states but most did not take into consideration the effects of AIS patients who could not tolerate contrast media or who incurred contrast-induced nephropathy (CIN). **CONCLUSIONS:** Economic evaluations in acute stroke imaging are of high quality with respect to published methodological guidelines. Economic analyses of imaging in AIS patients may benefit from the inclusion of important clinical components of AIS imaging modeling including the incidence of CIN and recurrent stroke in addition to the incorporation of CTP-specific outcome data.

##### PCV110

##### FACTORS INFLUENCING MANAGEMENT OF PATIENTS WITH ATRIAL FIBRILLATION IN CANADA AND SWEDEN

Lara N<sup>1</sup>, Evers T<sup>2</sup>, Levac B<sup>3</sup>, Fraschke A<sup>4</sup>, Pedrós M<sup>1</sup>

<sup>1</sup>Barcelona, Spain, <sup>2</sup>Wuppertal, Germany, <sup>3</sup>Toronto, Canada, <sup>4</sup>Solna, Sweden

**OBJECTIVES:** To explore the reasons for not initiating or stopping VKA treatment in patients with atrial fibrillation (AF) at moderate to high risk of stroke, along

with the reasons for considering some patients on VKA to be "difficult-to-manage". **METHODS:** A retrospective chart review was conducted with 39 Canadian and 29 Swedish physicians participating. Three cohorts of AF patients at moderate/high stroke risk (CHADS<sub>2</sub> score  $\geq 2$  points) were examined: a) VKA naïve, b) had stopped VKA treatment or c) receiving VKA and considered "difficult-to-manage". Variables retrieved were: sociodemographic data and comorbidities, variables related with AF and its management and the reasons why patients a) never received VKA, b) stopped VKA, or c) were considered "difficult-to-manage". **RESULTS:** In Canada, 187 patients were included (naïve/stopped/difficult-to-manage 62/42/83), 58.3% males, mean (SD) age 78.4 (8.9) years. In Sweden, 152 patients were included (naïve/stopped/difficult-to-manage 39/24/89), 68.4% males, mean (SD) age 76.0 (8.8) years. For VKA naïve patients, the most common reasons for not initiating VKAs were: Canada – transient nature of AF (40.3%), fall risk (30.6%); Sweden – patient refusal to take VKAs (28.2%), fall risk (1.8%), bleeding risk (1.8%). For patients who stopped VKA treatment, the most common reasons for discontinuation were: Canada – bleeding event (23.8%), patient unable to comply with therapy/monitoring (19.0%); Sweden – bleeding event (45.8%), clinical event (18.2%). For patients on VKA the most common reasons for being considered "difficult-to-manage" were: Canada – concomitant chronic diseases (55.4%), poor INR control (54.2%); Sweden – difficulties in following dietary/behaviour advice (24.7%), concomitant chronic diseases (22.5%). **CONCLUSIONS:** In Canada and Sweden the reasons for not initiating or stopping VKA treatment in AF patients were similar, with fall risk and bleeding events being commonly cited. The main reasons for considering a patient on VKA as "difficult-to-manage" are mainly related to concomitant diseases in both countries.

##### PCV111

##### PHYSIOLOGICAL PARAMETERS CAN HELP GUIDE HEART FAILURE THERAPY

Emmanuel J, Rathod K, Pittaway J, Mannan I, Mastan A

Royal London Hospital, London, UK

**OBJECTIVES:** Heart failure leads to significant morbidity and mortality. New pharmacotherapeutic interventions based on the patients heart rate have been incorporated into treatment algorithms, and may lead to improved clinical outcomes. We set out to assess the reliability of physiological assessments made at the bed side in the absence of BNP measurements. We also set out to assess adherence to new heart failure pharmacotherapeutic algorithm at our hospital, and to identify the prevalence of atrial fibrillation, and other aetiology in patients presenting with heart failure. **METHODS:** Most patients with chronic heart failure are managed in the community by nurse specialist and general practitioners. Patients with decompensated acute heart failure usually present to secondary and tertiary care. We undertook an audit to identify all patients presenting with heart failure over a 10 week period in a London Teaching Hospital (n=54). **RESULTS:** The average age was  $76.6 \pm 10.5$ , there were 30 males, 31 patients were of caucasian descent and 21 from ethnic minority, 2 patients were not categorised. There was a significant decline in heart rate ( $p=0.0013$ ), systolic pressure ( $p=0.0128$ ) and diastolic pressure ( $p=0.0254$ ) from admission. Patients with heart failure utilised significantly more bed days per admission than other cardiology admissions (10.34±1.3 against other cardiology- 8.78). Atrial fibrillation was a contributory factor in 16 patients. Ischaemic heart disease was noted in 21 patients, valvular heart disease was only noted in 6 patients. The therapeutic algorithm was not adhered to in most patients. The new therapy Ivabradine was under utilised, despite featuring in the algorithm. The breakdown of pharmacotherapy on admission: Furosemide (n=31), beta-blockade (n=26), ACE inhibitors and receptor blockers (n=26), Aldosterone receptor blockers (n=8), Calcium channel antagonist (n=9), Nitrates=10. **CONCLUSIONS:** Physiological parameters are useful in guiding therapeutic intervention. The new agents are under-utilised, and this may be due to a lack of understanding of their long term benefits in saved bed days. Therapies that promote a faster heart rate should be utilised with caution.

##### PCV112

##### PERSONAL CARDIOVASCULAR HEALTH RISK ASSESSMENT AND MANAGEMENT IN THE WORK PLACE: A PILOT PROGRAM

Yen JMC<sup>1</sup>, LU IC<sup>1</sup>, Yen SES<sup>2</sup>, Chien HC<sup>1</sup>

<sup>1</sup>E-Da Hospital/I-Shou University, Kaohsiung, Taiwan, <sup>2</sup>National Cheng Kung University, Tainan, Taiwan

**OBJECTIVES:** To set up a model for effective workplace health management as an occupational health service for employees of a steel factory in southern Taiwan. **METHODS:** In compliance with the administrative regulation of the company's policy, 53 male employees with persistent blood pressure (BP) higher than 160/100 mmHg, and 23 male employees with persistent fasting blood sugar (FS) higher than 200 mg/dl during the last three consecutive annual employee health examination were identified through a process of cardiovascular risk assessment, and recruited into a health management program, which consisted of health education for diet control and regular exercise, mandatory weekly BP or postprandial blood sugar (PC) monitoring at company medical office for 3 months, and subject was required to submit proof of physician visit and drug treatment if the subject was noted to have BP higher than 140/90 mmHg or PC higher than 200 mg/dl in two consecutive measurements. Outcome evaluation was analyzed with descriptive statistics. **RESULTS:** At the end of the program, the mean systolic BP among the 53 hypertensive subjects decreased from 161 mmHg to 145 mmHg, diastolic BP from 104 mmHg to 94 mmHg, and 7 of them achieved satisfactory BP control under 120/80 mmHg. The mean PC among the 23 diabetic subjects decreased from 297 mg/dl to 240 mg/dl, and 5 of them achieved satisfactory PC control under 140mg/dl. Out of the 46 subjects who filled out the program satisfaction survey, 97.8% were satisfied with the dietary control component of the health education course, 93.5% were satisfied with the exercise component, 97.8% were satisfied with weekly BP or PC measurements, and 58.7% would recommend the same program to their colleagues in the future. **CONCLUSIONS:** Company management policy is a key element in the success of workplace health management for the control of chronic diseases with high cardiovascular risk such as hypertension and diabetes.